Abstract of the Disclosure

A system and method for detecting a face using a pattern classifier learning face images and near face images are provided. The system includes a basis vector extractor, which receives a plurality of face images and a plurality of near-face images and extracts a plurality of face basis vectors expressing the face images and a plurality of near-face basis vectors expressing the near-face images; a feature vector extractor, which extracts face feature vectors and near-face feature vectors by projecting the face images and the near-face images upon the face and near-face feature vectors and projects an image, which is input for face detection, upon the basis vectors to extract the feature vector of the input image; a clustering unit, which classifies the face feature vectors and the near-face feature vectors into predetermined sub-classes and outputs a sub-class number of a sub-class including the feature vector of the input image among the sub-classes; a pattern classifier trainer, which trains each pattern classifier corresponding to a certain sub-class using face feature vectors and near-face feature vectors, which are included in the sub-class; and a face determiner, which applies the feature vector of the input image to the pattern classifier corresponding to the sub-class including the feature vector of the input image and determines whether the input image is a face image using the pattern classifier.